

Unit 731

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Unit 731

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Scriptie Biologische wapens

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Abstract

Between 1932 and 1945 Japan had a large scale research programme on biological and chemical weapons. In Manchuria, a conquered part of China, there were some Japanese research facilities. The most notorious of them is without a doubt Unit 731. At this army unit many people, mostly Chinese, were killed in scientific experiments. Human beings were used as guinea-pigs for the testing of a variety of biological and chemical weapons.

The genius behind the unit was a Japanese Army medical doctor named Ishii Shiro. Under his influences the Japanese Department of Military Affairs decided to develop biological weapons. Of course Shiro was appointed commander of the unit. In 1933 the unit started in Harbin and by 1941 some 2,000 people were working there. They had only one goal: to produce germ weapons in massive quantities and to test them so that the Japanese Army could wage germ warfare against its enemy.

The atrocities in the unit were incredible. Humans were dissected alive, infected with diseases or poisoned. Later on, frostbite was investigated, and people were frozen and defrosted. Entire villages were infected with contagious diseases using small airplanes. Estimates differ, but most authors agree that at least 3,000 people were killed in the experiments. The death toll is probably much higher, when the field experiments on Chinese villagers are also considered. The victims were mostly Chinese, but it is now clear that also hundreds of American, English and Russian POWS have been taken here.

At the end of World War II, the Russians invaded Manchuria and the Japanese destroyed all the buildings on the unit's compound. The remaining prisoners were killed and all the plague-infected rats and fleas were released into the area. All Unit 731 members were issued potassium cyanide for the case they would be captured by the Russians.

Directly after the war, most members of Unit 731 were captured by the Russians. The Russians put them in a tribunal, and some information on the experiments on live human subjects leaked out. Russia immediately sent a request through the International Bureau of Investigation to prosecute Ishii Shiro and all related personnel, but the request was rejected by the U.S. Government. The U.S. pensioned off Ishii Shiro and all his subordinates in return for the data related to human experiments, thus keeping the unit's business a secret. Up to this day, the Japanese government will still not confess these criminal offenses.

The last 15 years the true facts are slowly coming to light. Some excellent books have been written on the subject. But still it does not seem like the Japanese-American secret deal is generally known around the world. Furthermore, the threat of bioterrorism is bigger than ever. A small example has already taken place: the anthrax scare in the U.S.A. in 2001. A small number of countries is probably investigating biological weapons... Among them are the U.S.A.

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Introduction

Biological warfare is as old as humanity itself. As long as people have been waging war, they have used biological means to do so. In the Middle Ages the attackers would throw plague infected cadavers across the city walls. Another example were the English settlers in 1763 who brought some nice infected blankets as presents for the persistent Indians [TEC97].

This brings us to the definition of biological weapons:

Biological weapons can be divided into two subgroups: microbiological weapons and toxin weapons. Microbiological weapons are organisms, like viruses, bacteria or fungi. They are meant to bring illness or death to people, animals or plants. Toxins are toxic substances, produced by living organisms. As toxins are ordinary chemicals, they cannot multiply themselves.

Biological weapons can be used against humans by infecting water, air, food or otherwise. The most effective way is an aerosol attack. In that case a huge urban area could be infected by one single plane.

The subject of bacteriological weapons became very topical during the last months. The terrorist attacks of September 11th were followed by numerous anthrax letters to senators, journalists and other public people. The connection between these two different crimes has not been proven. Some people even think that the anthrax letters originated from within the United States. However, four persons have been killed by this totally new way of disturbing a society.

1.1 Some historical facts about biological warfare

After the use of toxic gases in World War I, the international community decided to put a ban on chemical and biological weapons. In Geneva, in 1925, a treaty was signed by many countries, not to use toxic gases and bacteriological weapons anymore. After World War II, people tried to ban not only the *use* of those weapons, but also to get rid of them for once and for all. It took some years but in 1975 a new treaty was ratified by 138 countries¹. Some 50 countries did not sign, of which many Third World countries. Every five years the countries that have signed, come together to talk about the fulfilment of the treaty and possible

¹The complete title is: "Treaty for the prohibition of the development, the production and the storing of bacteriological (biological) and toxin weapons and for the destruction of these weapons."

improvements. The most recent talks took place in the end of November 2001.

Although the treaty of Geneva was signed in 1925, some countries did not always stick to it. For example the English experimented with an anthrax weapon on the island of Gruinard, during World War II. And after the war some countries (USA, Sowjet Union, France, Great Britain) continued their research on biological weapons. Of course World War II was over, but for the USA and the Sowjet Union, the Cold War had just begun. It will become clear that in spite of the treaty, some countries have been and still are interested in biological warfare.

1.2 Subject of this report: Unit 731

When the subject of biological warfare is dealt with, one cannot ignore the subject of Unit 731. The existence of Unit 731 has undoubtedly been one of the darkest episodes in human history. It was a Japanese army unit that operated some years before, and during World War II. The things that happened there defy all imagination. In Manchuria, from 1933 to 1945, Japanese doctors performed thousands of cruel experiments on Chinese, Russians, Mongolians, and Koreans and killed all of them. At the Unit 731 only, at least 3000 people were tortured and killed [TSU99].

Of course one wonders why the deeds of the Japanese are not nearly as well-known as the Nazi crimes. The main reason for this is that the United States prevented the war criminals of Unit 731 from being convicted in the War Trials. In exchange for this hushing up the United States would get all the experimental data obtained by the Japanese. In the last 10, 15 years, the true facts are slowly coming to the surface.

Timeline

- 1925 Geneva Convention governing wartime conduct bans biological weapons. Japan refuses to approve treaty.
- 1932 Japanese troops invade Manchuria (figure 1.1). Ishii Shiro, a physician and army officer who was intrigued by germ warfare, begins preliminary experiments.
- 1936 Unit 731, a biological-warfare unit disguised as a water-purification unit, is formed. Ishii builds a huge compound more than 150 buildings over six square kilometers outside the city of Harbin. Some 9,000 test subjects, which Ishii and his peers called "logs," eventually die at the compound.
- 1942 Ishii begins field tests of germ warfare on Chinese soldiers and civilians. Tens of thousands die of bubonic plague, cholera, anthrax and other diseases. U.S. soldiers captured in Philippines are sent to Manchuria.
- 1945 Japanese troops blow up the headquarters of Unit 731 in final days of Pacific war. Ishii orders 150 remaining "logs" killed to cover up their experimentation. General Douglas MacArthur is named commander of the Allied powers in Japan.
- 1946 U.S. coverup of secret deal with Ishii and Unit 731 leaders germ warfare data based on human experimentation in exchange for immunity from war-crimes prosecution begins in earnest. Deal is concluded two years later.



Figure 1.1: Map of China. Manchuria is found in the north east.

- 1981 John Powell, a former publisher of a Shanghai magazine who was unsuccessfully tried for sedition in the early 1950s after accusing the United States of using germ warfare in Korea, exposes immunity deal in the Bulletin of Atomic Scientists.
- 1985 Dr. Murray Sanders, a former lieutenant colonel who was a U.S. adviser on biological warfare, claims that he persuaded MacArthur to approve the immunity deal in the fall of 1945.
- 1986 Congressional subcommittee holds one-day hearing in Washington, aimed at determining whether U.S. prisoners of war in Manchuria were victims of germ-warfare experimentation. Hearing is inconclusive. Only one out of 200 U.S. survivors was permitted to testify [GUY01].
- 2001 Terrorists send anthrax infected letters to a U.S. Senator, NBC and CBS television hosts, and to some tabloid journalists. Post office employees are infected. Five people die of inhalation anthrax, the dangerous form. The FBI are still not sure about the source of the anthrax spores.

The sources for the timeline have been: [HAR94] and [DAW94]. A very extensive timeline on bioterrorism can be found in [HIS02].

1.3 Goal of this article

As is already stated in the preceding paragraph, the things that happened in Unit 731 are hard to imagine. Especially in the west, the facts of the Japanese war crimes are not well known. One of the goals of this paper is to inform at least some students of the Eindhoven University of Technology of these horrible years.

A second objective is to show the evil role the United States of America have played in this history. In exchange for the experimental data, the U.S.A. provided the Japanese war criminals with immunity from further prosecution. Because of this very foul play, the bad guys never got what they deserved. This is almost unbearable for the Chinese, Korean and Russian relatives of the victims, but also for the hundreds of American POWS ('Prisoner Of War') still fighting for their recognition.

Finally, this history of over 50 years ago is linked to the present day situation, concerning the threats of bioterrorism. The question is if the U.S.A. still act in such a hypocritical way as they did half a century ago.

The establishment of Unit 731

2.1 The start of a new unit

In 1928, a Japanese army medical doctor named Ishii Shiro returned from an extensive visit to Europe. Ishii Shiro had been sent by General Nagata, a high-ranking official of the State Department of Military Affairs of Japan. The supposed purpose of Ishii Shiro's visit was to tour the European military teaching hospitals. However, the real reason for his visit was to investigate the status and progress of Germany in researching biological warfare. In 1930 upon returning to Japan, the Japanese State Department of Military Affairs decided to develop the biological weapons [ALL00].

In 1932, the Japanese Army Staff Headquarters established a germ research organization 'Epidemic Research Laboratory' in the Japanese Army Military Medical School, and it was headed by Ishii. In 1933, the Army established another secret germ weapon research facility in Harbin – a city in northeast China occupied by Japan, and named it the Kamu Unit. In 1936 by the decree of the Emperor, the Japanese Army set up two well-equipped and staffed germ warfare bases. One of them was located five kilometers south of Chang-Chun and was disguised under the name of "Kwan Tung Army Military Horse Epidemic Prevention Department" (Wakamatsu Unit). It was renamed to Unit 100 in 1941. The other one was located at Ping Fan, which is twenty kilometers south of Harbin, and was disguised under the name of "Kwan Tung Army Epidemic Prevention Department." It was re-named to "Togo Unit" and then to "Kwan Tung Army Water Supply and Epidemic Prevention Department." In 1941, it was again renamed to Kwan Tung Army Unit 731. After that, all equipment and personnel in other areas were relocated to Ping Fan. The total number of workers expanded to two thousand. Its mission was to produce germ weapons in massive quantity and research on methods of germ warfare so that the Japanese Army could wage large-scale germ warfare against its enemy. Shiro Ishii was named the commander of Unit 731.

Because its function became more important and also because its research activities grew quickly, between 1939 and 1940, the Emperor ordered several times to expand and re-organize this group, and in the meantime, it established four more branches. It was due to the Emperor and Army Headquarter's order and active planning that Unit 731 finally became a formidable germ warfare troop with a staff of three thousand scientists and technicians.

2.2 The goals of Unit 731

For the outside world the goal of Unit 731 was the prevention of epidemics in the army, but in reality it was a site for the research and preparation of microbial and chemical warfare. The scientists at the unit investigated the warfare possibility of a wide variety of diseases: the plague, anthrax, dysentery, typhoid, cholera and some other exotic and previously unknown diseases. So too were vaccines and blood sera for the prevention and treatment of diseases. Various disease vectors, mainly insects, were studied as were new drugs, chemical toxins and frostbite [ALL00].

The experiments in Unit 731 can be divided in two main groups: the first one contains laboratory experiments on, often alive, human beings (surgery, gas bombs). The second group are the field experiments on ignorant people in the villages of Manchuria.

Although the unit had been very secret, some people have talked about it in the course of the War Trials. An example is the following statement. It is the testimony of Tamurai Tadashi (previous commander of the Japanese Imperial Army in China) from the Khabarovsk Military Trial, October 31, 1949:

"General Shiro openly pointed out to me that his Unit [731] was preparing germ warfare against Russia. He also mentioned that they were capable of mass-producing weapons for germ warfare. He thought that these were some of the most powerful weapons the Japanese could use. Their effectiveness had already been proven in laboratories and humans."

"...I had seen many charts, diagrams and books in the office of General Shiro that described in detail the data collected from experiments using bombs, grenades and cannons to spread plague, cholera and other infectious diseases. These diagrams allowed me to thoroughly understand the tremendous potential of germ warfare. General Shiro and three other officers (whose names I cannot remember) accompanied me to inspect all the laboratories and production sites. I am not a microbiologist, and I cannot make accurate estimations in the field, but I still remember clearly the admiration I felt when they showed me the amount of bacteria that they had produced."

Horrors of the life in Unit 731

Life in Unit 731 was unimaginable. When you entered the Unit as a prisoner, the chances of getting out alive, were very small. A lot has been written about the Nazi concentration camps, and clearly those were horrible places to be. But the cruelties that were committed by the Japanese at Unit 731 are not well-known. The reason for this we will get back to.

3.1 The evil genius of Ishii Shiro

As mentioned earlier, the most important man behind Unit 731 was an Army doctor. His name was Ishii Shiro.

Ishii Shiro was unlike most young officers destined for high rank. His backers included some of the biggest guns in the Japanese military establishment. He regularly went on night long drinking binges. A prolific womanizer, he was well known in Tokyo's leading geisha houses. His ability to finance his 'recreational' activities on junior officer's pay remains mysterious. Later, however, he grew wealthy, insisting on kick-backs from contractors building his various 'facilities'. Remembered as the "Father of Japan's BW (Biological or Bacteriological Warfare) programme", his most notable observation was that BW must be significant otherwise "it wouldn't have been outlawed by the league of Nations [GUY01]."

Ishii Shiro was a brilliant medical doctor in the Japanese Imperial Army. He never concerned himself with the ethics of his profession, nor had he any need to: medical ethics were not taught and no ethical oath such as the Hippocratic Oath was administered in Japan at the time. As chairman of the BW research center at the Army Medical College in Japan Ishii was concerned that his successful laboratory BW experiments would not work in the field. He remarked, "There are two types of bacteriological warfare research, A and B. A is assault research, and B is defence research. Vaccine research is of the B type, and this can be done in Japan. However, A type research can only be done abroad." In 1932, Ishii secured an assignment to tour Japan's newest acquisition, Manchuria. He remained there and was given complete liberty by the Army to set up a human experimentation program [HAR94, pp. 5,14].

3.2 Different atrocities

Two forms of human atrocity took place in the units and hospitals of Manchuria and China [COO89, p. 117]. The first was the human experimentation that enabled medical assistants

and doctors to 'practise' their surgical skills. Japanese doctors performed surgery on live prisoners to practise for emergency field surgery on fallen Japanese soldiers. One Japanese doctor, Yuasa Ken, later confessed to his first experience where he and 15 other doctors gathered around a 'patient' to conduct surgery on a 'what if' basis. He explained: "First, was practice in removing an appendix. That was carried out by two doctors. Because there was nothing wrong with this man it was hard to locate. They made an incision, but had to cut in another place and search until they finally found it... Next a doctor removed one of his arms. You must know how to do this when a man has shrapnel imbedded in his arm. You have to apply a tourniquet, to stanch the flow of blood. Then two doctors practised sewing the intestines. If the intestine or stomach is pierced by bullets, that kind of surgery is a necessity." His confession continued with more horrifying examples. The medical training often consisted in torturing live, non-anesthetized Chinese and other war prisoners.

Even more appalling, however, was the deliberate infecting of Chinese civilians with various diseases to conduct tests [KRI95, p. A1]. The exact number of BW test victims is unknown; however, scholars and former members of the unit claim at least 3,000 men, women, children and newborn babies were murdered in these experiments. There were no survivors. In one procedure a healthy individual would be locked up with diseased prisoners to determine how quickly a disease spread. Victims would be injected with deadly viruses such as the plague or anthrax and dissected live to examine the effects of the infection. Anesthesia would not be given, as one former researcher explained, out of concern that it might affect the results of their tests.

Hiroshi Matsumoto, a former medic with the less notorious BW base, Unit Ei 1644, says that captives were observed and tested in cages just large enough for one naked captive to sit cross-legged. For three to four months division members would inject prisoners with a variety of bacteria and observe them. Blood samples were taken continuously until the "patient" was too weak and had to be killed [HAR94, p. 27]. In Unit 731, and its precursor, a laboratory in the village of Beiyinhe, prisoners were handcuffed and shackled most of the time. Once Ishii's subjects lost their research value, they would be shot or injected with poison, dissected, and cremated. Many documents were destroyed in 1945 or confiscated by the United States but accounts of some experiments remain. One diary reads: "Potassium cyanide; the subject was injected with 15 mg. of it; lost consciousness approximately 20 minutes later. Several jolts of 20,000 were not enough to kill the subject; injection of poison required to kill the subject." And on another subject: "5,000 Volts were not enough; after several minutes of continuous currents, subject was burned to death" [GUY01].

As the war progressed, officers at units like 731 committed acts more and more extreme. Ishii tested for human reactions to anthrax, glanders, the plague, infectious jaundice, typhoid, smallpox, gas gangrene, dysentery, cholera, scarlet fever, epidemic hemorrhagic fever, diphtheria, epidemic cerebrospinal meningitis, venereal diseases, and countless others. A complete catalogue of diseases that the various death factories administered to their human guinea pigs does not exist. Later, as Japan anticipated war with the Soviet Union in sub-zero weather conditions, frostbite became a focus of experimentation. Victims were frozen and defrosted using a variety of techniques [HAR94, p. 59].

As documents and eyewitness accounts reveal, the primary goal of the BW research was to develop plague bombs for use in the war. Consequently, 'small scale' field tests were organized in isolated fields near the unit bases. The network of secret units all over Manchuria and China

	By Nazis	By Japan
US POWs captured & interned in WWII	96,614	33,021
US POWs died while interned	1,121 (1.1%)	12,256 (37%)
US civilians captured & interned in WWII	4,749	13,996
US civilians died while interned	168 (3.5%)	1,536 (11%)

Table 3.1: Comparison between the behavior of the Japanese and the Germans during World War II. Source: The Center for Civilian Internee Right, Inc.

also conducted larger field testing, dropping experimental plague bombs on Chinese cities and villages to measure effectiveness in causing outbreaks. Subsequent plague outbreaks proved the potency of BW on a larger scale [KRI95, p. A1].

The southeastern village of Congshan is one of the few confirmed sites of biological warfare attacks in modern history. In August of 1942, a Japanese plane flew over the tiny hamlet, releasing a mysterious smoky substance. This resulted in a bubonic plague epidemic that ravaged the village for two months, until Japanese troops entered and began burning down plague-ridden homes, possibly to destroy the evidence. During the worst period, the plague killed twenty Chinese civilians every day. Some of the worst casualties "ran or crawled down the narrow alleys to gulp putrid water from open sewers in vain attempts to vanquish the septic fire that was consuming them" [TYL97].

3.3 The source of the 'marutas'

'Maruta' is Japanese for 'log of wood' [ALL00]. This describes the way the Japanese looked at people from a different race. Obviously, it is a clear racist point of view and it is not different from the Nazis in Germany.

From the point of view of the Japanese military, one of the advantages of China was the availability of research subjects on whom germs could be tested [KRI95]. Ishii's Unit 731 recruited most of its captives from Harbin, where the unit was located. Most subjects were communist sympathizers or Han Chinese. Others were ethnic Russians, Mongolians, Koreans and European expatriates accused of various crimes, as well as American POW's. The mentally handicapped were also entrusted to Unit 731's custody. All were charged with capital crimes, rapidly convicted and sentenced to death, and sent to the 'laboratory' where they were "to be used as 'experimental material' to fulfill their sentence." Sometimes more human specimens were needed suddenly. Then the Japanese would arrest ordinary residents of Harbin for crimes as petty as opium smoking. Supposed vagrants were also rounded up. Japanese secret police agencies were on hand to instill fear among the citizens. Those who voiced any opposition to the "self-declared 'paradise' of Manchukuo" were subject to a detention from which many never returned.

The collapse of Unit 731

4.1 The end of the war

In 1944 right before the defeat of the Japanese, the Japanese army released many explosive containing balloons that floated on a course towards the United States mainland [ALL00]. Of these balloons, two hundred reached the Western coastline. Seven people died from these explosives. Japan had a number of generals who wanted to load biological weapons on the balloons to kill people, livestock, and crops. However, the Japanese leader, Tojo Hiteki, prohibited this plan. He was afraid that using biological weapons on the U.S. would result in vengeful retaliation. In 1945 at the end of the war, Unit 731 came up with a plan called "Sakura at night" ("Flowers at night"). They conspired to send kamikaze to California to spread germs. Twenty kamikazes planned to execute this command on the night of September 22nd. Fortunately, at the beginning of August, Japan had already planned to surrender.

On August 8, 1945, the day after the atomic bombing of Hiroshima, Russia began to attack Japan. Russia sent troops to Northeast China, the site of the Kuan Tung troops. At the time, Unit 731 was afraid its secrets would be discovered, so all equipment was secretly destroyed and the buildings were blown up. All remaining marutas were killed. Before the Japanese left, they released all the remaining plague-infected rats and fleas into the countryside. The Ping Fan surroundings immediately became a disaster area. Before retreating, Unit 101 soldiers laced rice and noodles with bacteria and poison and sent it to the Chinese. Many people died due to the plague and poisoning.

In 1946 right after the spring, the epidemic had spread throughout Northeast China. Many people died of the plague. After three months of rescue, the plague was finally contained. From 1946 to 1948, at least 20,000 people were killed by the disease spread by Unit 731 and Unit 100. In fighting these disasters, the Chinese never considered who the criminal was until today, the poison gas bombs deserted and buried by the Japanese Army before they fled, still torment China. After the poison gas bombs corroded and crumbled, they caused not only environment pollution but also injuries to the innocent civilians in accidental explosions.

Between midnight and 1 a.m. on the morning of August 9th, after Hiroshima had been devastated by the atomic bomb, the Soviet Army swept across the border into Manchuria and Korea. The Kwan-Tung Army was thrown into panic; confusion broke loose.

Recalled by Ishii's daughter Harumi, "shortly before our evacuation from Harbin, I heard my father whispering with his men something about an "uranium bomb" ... I remember that my father said, "Shall we use it then?" I didn't have any idea as to the nature of "it", but now

I realize he meant the germ weapons his team of researchers had developed. Later, I heard that the plan was dropped because the Emperor opposed it."

Destroying all Evidence of the Existence of Unit 731

Unit 731 members heard a broadcast newsflash about the Soviet invasion. Three days later, they were ordered to put to the torch all buildings, living quarters, equipment, materials and documents. Branch chiefs were asked to issue potassium cyanide to their entire personnel for use if captured by the Soviets.

At Ping Fan, marutas were the first to be destroyed. Members of the 516 CW Unit gassed the marutas by throwing Erlenmeyer flasks of toxic chemicals into their cells. Six hundred local Chinese laborers who worked at the Yagisawa plant disease farm and elsewhere at Ping Fan were machine-gunned. Potassium cyanide poison was also put in the marutas' breakfast food.

"All of us had to begin the evacuation work", said ex-Unit 731 personnel Naoji Uezono. "First of all the marutas were killed. Then their bodies were put in the incinerator. The specimens taken from human bodies were also put in, but there were so many that they just wouldn't burn. So we took them down to the Sungari River and dumped them in." Some bodies were thrown into the Ro block courtyard pit, covered with heavy fuel oil and set alight. Hot bones, all that remained, were collected, put in straw bags and dumped in the river along with hundreds of pairs of manacles.

The local sapper brigade took a full three days to demolish the main buildings. So rigid were some of the concrete structures that they resisted dynamite. Finally, the eighty unused Ford trucks were loaded with 50-kg bombs and set to ram the buildings. Ishii's ceramic Uji bombs were smashed. Those loaded with fleas were taken to the boiler room and incinerated.

Unit 731 members were issued vials of poison. Ishii had originally wished every branch member and all families in Togo village to commit suicide. But this proposal met the violent disagreement of Maj-Gen. Hitoshi Kikuchi, 731's research chief.

At last, Ishii swore them to "life in the shadows" for the rest of their lives. Ishii ordered them never to speak of their military past, never to take official positions in the future, and never again to contact each other.

After the war: judgment and denial

It is clear from the previous chapters that the Japanese Army and scientists have been guilty of many terrible crimes against humanity. It would have been the right step if the international community had brought these people to trial. An attempt to do so has been made in the Tokyo Trials. Unfortunately the majority of the Japanese war criminals was not tried but released [TIA01]. This mistake happened under the strong influence of the United States, as will be described in this chapter. They were facing the start of the Cold War and the Americans did apparently everything to prevent the Sowjet Union from getting hold of the experimental data of Unit 731. This would form a too big threat to the American national security.

5.1 A Faustian deal

US pardoned Unit 731 members in exchange of experimental data

According to published data, U.S. intelligence knew about the work of Unit 731 long before the end of the war [ALL00]. However, at the end of the war, Ishii Shiro and all his subordinates were pensioned off by the U.S. Government in return for the data related to human experiments. Because of this 'plea bargain', the criminal acts of the notorious Unit 731 have disappeared from history with the end of the war. Up to this day, the Japanese government still will not confess these criminal offenses.

In 1949, some members of Unit 731 were captured by the Russian army in Manchuria. When the Russians tried them in a military tribunal, some of the information on Unit 731 leaked out. One of the members of Unit 731 in the bacteria production department, under interrogation by Russian personnel, confessed that Unit 731 practiced experiments with live human subjects. Russia immediately sent a request through the International Bureau of Investigation to prosecute Ishii Shiro and all related personnel, but the request was rejected by the U.S. Government. Unit 731 has not received its deserved prosecution and trial, just as the Japanese emperor has never been tried as a war criminal. This was all influenced by the decision of the U.S. Government.

Members of Unit 731 enjoyed prominent careers in Japan

Because the U.S. Government helped to keep the unit's business a secret, Ishii Shiro, the commander of Unit 731, lived a peaceful life after the war. He died in 1959 of throat cancer.

His medical career was also very distinguished. Many of the medical doctors serving under him also went on to long, prominent careers in Japan. Some became high-ranking officers in the government. Others became chairmen of Japanese medical associations. One became chairman of the Japanese Olympics. In general, the fairness of the Tokyo military trials is still doubted.

Japanese deceived Americans, McArthur approved the pardon

One week after Japan surrendered to the Allied Forces, Lieutenant Colonel Sanders arrived in Japan. He was among the first batch of Americans sent there. His mission was to imminently uncover the Japanese bacteriological warfare organization and to locate its commander General Ishii. During the next three months, he interrogated numerous Japanese military leaders and scientists from Unit 731, but he could not find Ishii.

From his first days in Japan, Lt. Sanders was intentionally misguided by the assigned interpreter Naito. To hasten the task of obtaining the Unit 731 research material, Sanders suggested to General McArthur that, "I make a promise to Naito to not prosecute any person as a war criminal who participated in germ warfare." This suggestion received approval from General McArthur.

In early September, Sanders discovered that Unit 731 had performed experiments on live humans. When he reported this back to General McArthur, he was told to keep silent on this issue.

US Suppressed Prosecution of Unit 731 to Keep its Bacteriological Warfare Data

Sanders went back to the US for business after staying in Japan for only ten weeks. He handed over the second stage of the investigation to his colleague Lieutenant Colonel Arvo Thompson. Sanders never returned to Japan to finish his investigation. Forty years later he wrote in his memoirs "I told Lieutenant Colonel Thompson about the anthrax bomb and the use of live humans in experiments. I specifically asked him to search for anthrax experiment data and the Uji bomb."

When Lieutenant Colonel Thompson arrived in Japan, the Tokyo Military Tribunal was just about to start the trial of the Class A war criminals. Although Ishii had arranged a fake funeral ceremony in his hometown and the Japanese newspaper alleged that he was dead, Ishii knew that he could not hide forever. He finally surrendered to the allied authority. Thompson interrogated him for more than a month (from January 17 to February 25, 1946). To parry the investigation, Ishii was very thrifty on his words and purposely toned down the scale of the bacteriological warfare research, denying his experiments on live humans, but boasted of his knowledge about bacteriological warfare. Thus, Thompson was equally deceived by the Japanese. He only mentioned the technology of making germ bombs and the knowledge of cultivating large quantity of germs in his May 1946 report.

Under the influence of General McArthur, Joseph Keenan, the Chief Prosecutor of Tokyo Military Tribunal, suppressed Russia's motion to prosecute the Japanese war criminals of germ warfare. Major General Charles Willoughby, Head of the Intelligence Department of the Allied Forces Headquarter under General McArthur, controlled all of Unit 731 personnel's contacts with the outside world in order to prevent the leak of the bacteriological warfare information to the Russians.

American Lieutenant Colonel Murray Sanders now regrets the pardon of Unit 731. When

Murray Sanders recalled the past, he said that it was a mistake for the criminal Japanese to have been pardoned [NBC95].

What happened to the members of Unit 731 after the war

It is presumed that Unit 731 was composed of more than 3,500 soldiers and military workers. What have they been doing after the war? Some of the middle and high-ranking officials of the Unit and the cooperative medical scientists have occupied important positions in Japanese society. Just some examples [ALL00]:

Ishii Shiro – received immunity from responsibility for war crimes from the United States. He could not be appointed to any more important posts after the War. He was escaping the USSR's pursuit of war criminals. He was not able to take part in society like the other former members of Unit 731 did after the War. In 1959, he died of laryngeal cancer at the age of 69.

Ryoichi Naito – founded a business enterprise. In 1951 Ryoichi Naito, who belonged to the Epidemic Prevention Laboratory, established the Japan Blood Bank Company (currently the Midori Juji Co., Ltd.) with Masaji Kitano, Hideo Futagi, and others involved in Unit 731, as promoters. After that, Naito took office as CEO of Midori Juji Co., Ltd.

Kozo Okamoto – pathology squad leader at Ping Fan between 1938 and 1945, who carried out human vivisection experiments, later became a professor of Kyoto University and director of the university's medical department. He went on to become an emeritus professor of the university and then medical director of Osaka's Kinki University.

Hideo Tanaka – Unit 731's expert on the mass production of fleas, later became Director of Osaka Municipal University's School of Medicine. For his research, he received an Order of the Rising Sun in March of 1978.

Naeo Ikeda – runs a clinic specializing in blood diseases in a suburb of Osaka. When he was asked about the documentary evidence that had been found that indicated that he had supervised injections of tetanus into the heels of prisoners of war, and to which his name was attached, he declined to answer. He muttered that he was "too old... it was a long time ago." He shuffled away.

Shiro Kasahara – researched Songo fever at Ping Fan and published medical papers undoubtedly based on his experiments on human beings at Ping Fan. He became Vice-President emeritus of the Kitasato Hospital and Research Unit in Tokyo. When he was asked about the work at Unit 731, he replied: "I feel very guilty about what I did.... I think I did wrong."

Whitewash of Unit 731 History in Japanese School Textbooks

After all these years, the Japanese government has still not expressed any apology. Even worse, the crimes of all the scientists in Unit 731 are still denied. Of course, there always comes a moment that a few people raise their voices. That also happened here. Saburo Ienaga, a professor of the former Tokyo Educational College, claims that the textbook censoring system by the Ministry of Education violates the Japanese Constitution and the basic Education Law.

He initiated a series of three legal suits against the Ministry of Education over this issue, and they came to be known as the 'Ienaga Suits'. One of the points of conflict in the third suit is the activity of Unit 731.

Before the Ienaga Suits, it was taboo to write about Unit 731 in textbooks for schools. The Ministry of Education stated in its examination of the textbooks that there was still no reliable research concerning Unit 731, so it was too early to raise this issue in textbooks. (Statement of the Ministry of Education opposing amendment, December 1983.) The decision of the Ministry of Education was "The whole description should be deleted."

The threats of today

Starting November 18th 2001, a three week meeting was held in Geneva, to review the 1975 treaty on biological weapons. On the first day, the U.S.A. accused six countries of the development of biological weapons. According to John R. Bolton, undersecretary of state for arms control, "the existence of Iraq's program is beyond dispute and the United States strongly suspects North Korea, Libya, Syria, Iran and Sudan of developing programs" [HIG01]. "The United States strongly suspects that Iraq has taken advantage of three years of no U.N. inspections to improve all phases of its offensive biological weapons program."

Bolton also told the 144 nations that have signed the 1972 Biological Weapons Convention that the United States finds North Korea's biological weapons program "extremely disturbing." He said the United States believed North Korea had a dedicated, national-level effort to achieve a biological weapons capability and that it has "developed and produced, and may have weaponized" biological agents.

"There are other states I could have named which the United States will be contacting privately concerning our belief that they are pursuing an offensive biological weapons program", he said. Bolton said the United States knows "that Osama Bin Laden considers obtaining weapons of mass destruction to be a sacred duty and wants to use them against the United States."

It is clear that there are unfortunately still quite some countries developing or investigating biological weapons. This situation forms a threat to the whole world. That is why this subject is one the big issues of our time, although not everybody seems to be aware of that.

This chapter will first deal with bioterrorism, of which we saw the first, very recent acts, only months ago. Furthermore, the question will be asked: "Who is guilty?" when it comes to biological weapons.

6.1 Bioterrorism

After the September 11th attacks the world has seen, for the first time, a clear example of bioterrorism. In the United States, several anthrax infected letters have been sent to different people. Senators, journalists, and possibly even ordinary people have been the target of these terrible acts. By many the letters have been linked to Osama Bin Laden and his Al-Qaeda network. Another possibility is that the threat comes from within the U.S. Some say ultra right-wing (read: extremely anti-government) groups would have access to anthrax bacteria.

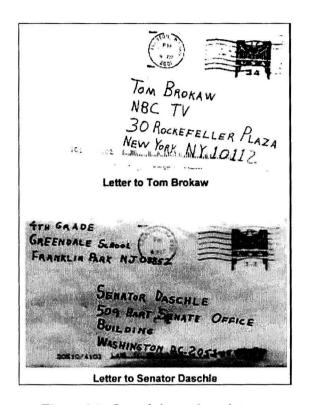


Figure 6.1: One of the anthrax letters.

The anthrax attacks show that, even for small organizations, it is possible to make a biological weapon. In fact, it is relatively easy to get the required bacteria. Furthermore, the knowledge that is needed to make germs into a potential weapon (a bomb for example) is basic and a first-year student of biology or bio-chemistry should be able to do it. The difficulty lies in the transportation of the germs to the right place or person. This is illustrated by the anthrax letters. The powder in the letters has shown to be a good method to transport the germ. But the person who was infected, was in most of the cases not the intended one. Some mail personnel has been infected, whereas the target was probably a politician, a senator for example.

6.2 Who is guilty?

Many of the countries that possess knowledge of biological weapons have been mentioned already. In the introduction the recent accusations of the U.S. were summarized. These suspicions are well founded and therefore have to be taken very seriously.

On the other hand, we have seen in chapter 5 that the United States itself must possess a large amount of experimental data, namely the results of the Japanese experiments, which they traded for immunity for the Japanese war criminals. Also it is known that the Americans have had their own BW research program. They have allegedly used biological weapons in the Korean War and the Gulf War [GUY01]. Added to that, there have been very recent ar-



Figure 6.2: The anthrax bacteria.

ticles where the U.S. government admits that the American intelligence services very secretly have done research on new biological weapons [VOL01]. The White House defended this by emphasizing that "this was purely defensive research and therefore it was not conflicting with the 1975 treaty, that prohibits the production of biological weapons."

This was the White Houses response to a New York Times revelation that the CIA had built a (model size) bacteriological bomb [MIL01]. The Americans feared that a similar Soviet-made bomb was circulating in the international weapon market. The goal of the investigation was to check the possible damage of such a bomb. According to the NY Times, President Clinton was only informed about the project, after it was running fully. Some presidential staff wanted the project to be stopped, but Clinton's legal staff concluded that the project was not in conflict with the 1975 treaty. The treaty prohibits the development of biological weapons, but allows experiments with vaccines and other protectional measures.

According to the NY Times the Pentagon also built a small factory on a Nevada compound. Its goal was to study how easy it is to unnoticedly produce bacteriological weapons. The Pentagon said no deadly bacteria were used. The little factory was only meant as a test object to refine the tracking methods.

The paper says the Pentagon is about to start a new investigation that is challenging the treaty. It concerns tests with a genetically altered variant of the anthrax germ. But this project too is strictly defensive, the government stresses. The main goal is studying if the anthrax vaccine, that is used in the military these days, can cope with this new form of anthrax.

6.3 Conclusion

This newsflash of only a few months ago, was meant to show the continuous hypocrisy of the United States of America. On one side they are accusing other countries of developing the terrible biological weapons of mass destruction. On the other hand, they are (and have been) secretly doing the same thing themselves. And they have used it in the past.

The future does not look very hopeful. The United States is pointing its finger at some 'villain states', which are probably indeed developing biological weapons. At the same time, however, the most powerful country in the world is on the sly investigating those horrible weapons too. And with the quick progress in genetics, bioterrorism can only become more dangerous.

Epilogue

One could imagine that it is not a pleasure to read this article. It deals with some of the most horrifying acts of human behavior ever seen. The reader could easily get feelings of disgust and anger. Anger about the terrible things humans have done in the past, and disgust, because of the hypocrisy and the stupidity of some people in the present. The same mistakes are made again and again. At this very moment, we are having problems with biological weapons. So far, we have been so lucky that no one has made a germ bomb, but the anthrax letters were the first pinpricks. We are living in a new millennium, but sometimes it feels like the people in power are still living in the Middle Ages.

How terrible it might be, we find it somehow interesting to read about subjects like Unit 731. And we *should* read about it. Because it is too unknown among people. Because politicians act as if there never was a Unit 731. Because it is a part of our history, equally important as the Nazi time. We should learn from it and try to act more responsibly than our ancestors. We have to try to get rid of biological weapons forever. Biological weapons will prove to be the most dangerous of all, more than conventional and even nuclear weapons.

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